REMARKS

The drawings are objected to. Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Rylander
5 (US 5,602,572). Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Gunther et al (US 6,705,702). Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Torpey et al (US 6,290,330). Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US
10 6,361,144) in view of Barton et al. (US 5,861,896). Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Torpey et al. (US 6,348,847). Claims 11-13 are objected to as being dependent on a rejected base claim.

15 1. Objection to the drawings:

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters 52, 54, 56, 58, and 60 have been used to designate both a printing window, columns, and steps for a printing algorithm. In Fig.7, reference character 106, decision block, contains one entrance and three exits.
20 This type of block has "yes" or "no" exits only.

Response:

As explained in the Amendments to the Drawings section above, replacement sheets for both Fig.6 and Fig.7 are enclosed to correct the errors with
25 the drawings. No new matter has been added. Corresponding changes have also been made to the specification, as shown in replacement paragraphs [0033] to [0039].

2. Rejection of claims 1, 2, and 4 under 35 U.S.C. 103(a):
30 Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Rylander (US 5,602,572) for reasons of record, as recited on pages 2-3 of the above-indicated Office action.

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Response:

  Claim 1 has been amended to overcome this rejection. The amendments more clearly distinguish the claimed invention from the Torpey ('144) and Rylander patents. Torpey ('144) and Rylander both teach altering pixels a halftone image before printing for reducing intercolor bleeding.

  On the other hand, the present invention alters pixels in a source color image before converting the source image into a plurality of halftone images to be printed. By altering the pixels of a source image, memory and computation savings are realized. To more clearly define the invention recited in claim 1, the term "source image" has been replaced with "continuous tone source image". A corresponding change in the specification has also been made in paragraph [0034] for explaining the terms used in claim 1.

  This amendment to claim 1 is inherently supported in paragraph [0034] of the specification. In paragraph [0034, the source image is converted from an RGB color image to a CMYK color image. Since the image is composed of the basic colors needed to create a color image, the image can be thought of as a continuous source image. The continuous source image contains a high number of colors, which approximates an unlimited number of colors having a continuous change in color among them.

  Claim 1 contains two separate limitations that each differ from the teachings of Torpey ('144) and Rylander. First of all, neither patent teaches "performing a pixel altering function to alter pixels of the continuous tone source image along the border region between the first color area and the second color area". Instead, each patent teaches altering pixels in a halftone image. Furthermore, neither patent teaches "converting the continuous tone source image into a plurality of halftone images after performing the pixel altering function". Instead, the patents teach converting images to halftone images **before** altering pixels.

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Although Torpey ('144) and Rylander teach altering pixels in a halftone image, the halftone image is considerably different from a continuous tone source image. The continuous tone source image is a color image that contains a large number of colors. The halftone image contains monochromatic dots of varying densities, and does not read on either a color source image or a continuous tone source image.

As disclosed in paragraphs [0052] to [0055] of the specification, the method recited in claim 1 offers savings in both memory and required calculations needed to perform the pixel alteration process over that of the prior art method. Therefore performing pixel altering on the continuous tone source image provides significant advantages over the methods taught by Torpey ('144) and Rylander.

Since neither Torpey ('144) nor Rylander teach performing a pixel altering function to alter pixels of the continuous tone source image, either alone or in combination, claim 1 is patentably distinct from Torpey ('144) and Rylander. Claims 2 and 4 are dependent on claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 1, 2, and 4 is respectfully requested.

3. Rejection of claims 3 and 5 under 35 U.S.C. 103(a):

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Gunther et al (US 6,705,702) for reasons of record, as recited on pages 3-4 of the above-indicated Office action.

Response:

Claims 3 and 5 are dependent on claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 3 and 5 is requested.

4. Rejection of claims 6 and 7 under 35 U.S.C. 103(a):

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torpey et al (US 6,361,144) in view of Torpey et al (US 6,290,330) for

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reasons of record, as recited on page 4 of the above-indicated Office action.

Response:

Claims 6 and 7 are dependent on claim 1, and should be allowed if claim 1 is

5   allowed. Reconsideration of claims 6 and 7 is requested.

5. Rejection of claims 8 and 9 under 35 U.S.C. 103(a):

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Torpey et al (US 6,361,144) in view of Barton et al. (US 5,861,896) for

10   reasons of record, as recited on pages 4-5 of the above-indicated Office action.

Response:

Claims 8 and 9 are dependent on claim 1, and should be allowed if claim 1 is
allowed. Reconsideration of claims 8 and 9 is requested.

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6. Rejection of claim 10 under 35 U.S.C. 103(a):

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Torpey et al (US 6,361,144) in view of Torpey et al. (US 6,348,847) for reasons
of record, as recited on page 5 of the above-indicated Office action.

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Response:

Claim 10 is dependent on claim 1, and should be allowed if claim 1 is
allowed. Reconsideration of claim 10 is requested.

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Respectfully submitted,

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